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GREAT LAKES FOREST RESEARCH CENTRE
CENTRE DE RECHERCHE FORESTIÈRE DES GRANDS LACS

Medium-term market outlook for the Ontario newsprint industry

J. D. Johnson

Miscellaneous Report No. 26

Canada

87-03896/

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MEDIUM-TERM MARKET OUTLOOK FOR THE ONTARIO NEWSPRINT INDUSTRY

J.D. JOHNSON

GREAT LAKES FOREST RESEARCH CENTRE

CANADIAN FORESTRY SERVICE

GOVERNMENT OF CANADA

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ABSTRACT

The major markets for Ontario-based newsprint producers are located in the midwestern and northeastern United States. Growth in the demand for newsprint in these market areas will be limited over the next five years. In addition, these markets will become increasingly competitive over this period. Selective capital programs are necessary to meet the increasingly stringent quality requirements of customers and to reduce production costs. Even though growth in newsprint production capacity in the province will be minimal over the next five years, capacity utilization rates will not approach 100% until the end of the decade.

RÉSUMÉ

Les principaux débouchés du papier journal produit en Ontario se trouvent dans le Midwest et le Nord-Est américains. Au cours des cinq prochaines années, la demande ne connaîtra qu'une croissance limitée sur ces marchés. Qui plus est, ces derniers seront soumis à une concurrence de plus en plus serrée durant cette période. Les producteurs devront investir d'une façon sélective pour répondre aux exigences qualitatives de plus en plus grandes de leurs clients et réduire les coûts de production. Même si la capacité de production de papier journal augmentera très peu ces cinq prochaines années dans la province, les usines ne fonctionneront pas à plein rendement ou presque avant la fin de la présente décennie.

ACKNOWLEDGMENTS

The author would like to acknowledge the assistance of staff of the following organizations in the preparation of this report:

- Abitibi-Price Inc.
- Boise Cascade Canada Ltd.
- Great Lakes Forest Products Ltd.
- Ontario Paper Ltd.
- The Ontario Forest Industries Association

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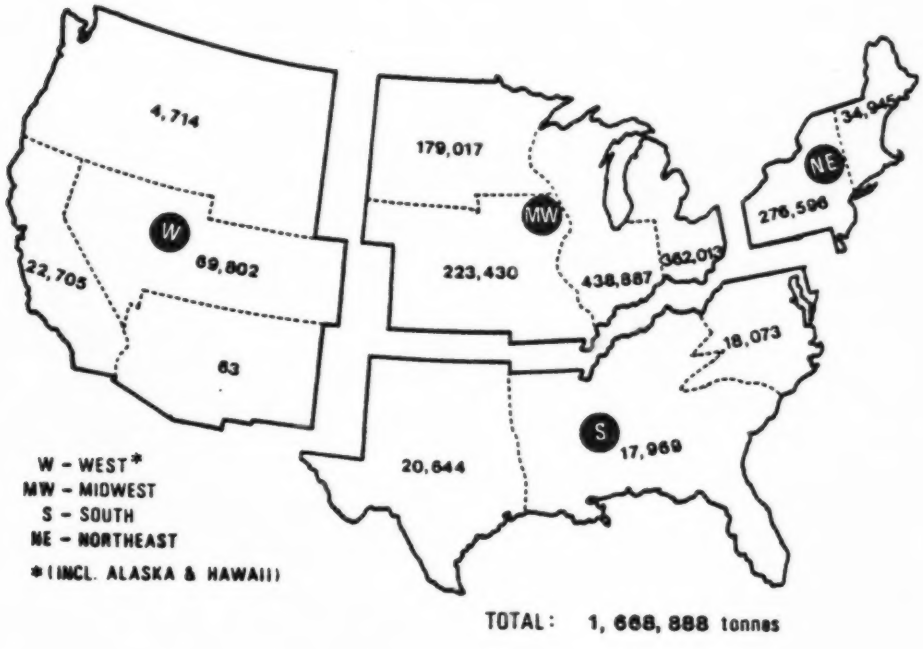
PURPOSE OF THE REPORT

The purpose of this report is to examine a number of key economic and social variables as they affect regional newsprint demand in the United States, in order to identify opportunities and constraints facing Ontario's newsprint industry over the medium term.

PRODUCTION AND SHIPMENTS

Ontario's newsprint industry is export-oriented. On average, 95% of Ontario newsprint is exported, and virtually all newsprint exports from Ontario are destined for the United States. In 1984, the Ontario industry shipped 1.8 million tonnes of newsprint, of which approximately 1.7 million tonnes, worth just over $1 billion, were exported to the United States. Figure 1 illustrates the destination of newsprint exports in 1984 from Ontario to the United States by census subregion.



Source: Statistics Canada. Canadian newsprint exports, by province of origin and destination. Requested compilation.

Figure 1. Destination of Ontario's newsprint exports to the United States, 1984

It can be seen from Figure 1 that the majority of newsprint exported from Ontario goes to the midwestern and northeastern United States. At present, 70% of this newsprint is exported to the midwest and 20% to the northeast. Approximately 4% of Ontario newsprint exported to the United States goes to the south and 6% goes to the west.

Figure 2, which illustrates Ontario newsprint exports by destination from 1970 to 1984, shows clearly that exports to countries other than the United States are negligible.

Figure 3 shows newsprint production, shipments, and exports from Ontario between 1966 and 1984. Reduced levels of activity as a result of the eastern Canadian Paperworkers' Union strike, the recession of 1975 and 1976, and the subsequent recession in 1982 are evident. Shipments peaked in 1974 and again in 1984 at approximately 1.8 million tonnes.

HISTORICAL DEVELOPMENT

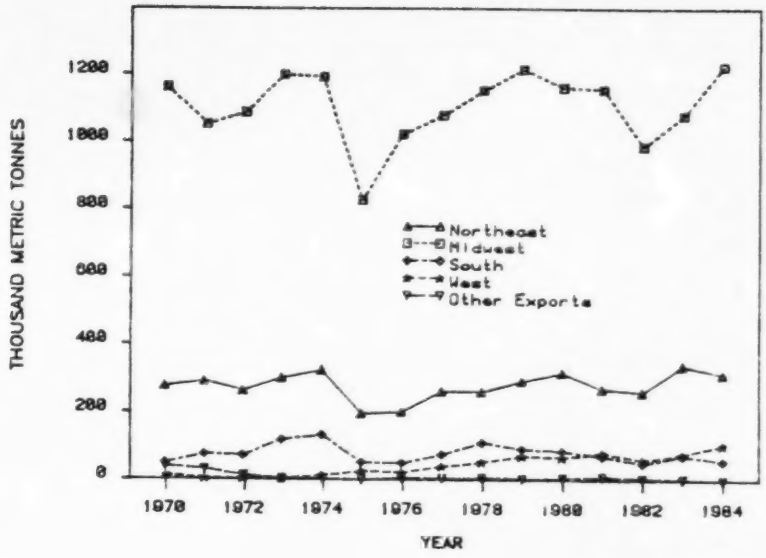
Ontario's newsprint industry developed rapidly after 1913, the year in which the United States government reduced its tariff on newsprint imports (McCubbin 1983). By 1928, six newsprint mills had been established in Ontario. Growth in capacity until the 1960s was slow but steady in response to increasing demand for newsprint in the midwestern and northeastern United States.

In the following years, growth in capacity slowed considerably. Between 1970 and 1984, newsprint capacity in Ontario increased by less than 5%. Over the same period, overall newsprint capacity in Canada increased by 11%, primarily as a result of increases in British Columbia and Atlantic Canada. Newsprint capacity in the United States increased by 63% between 1970 and 1984, with the greatest increase in the south (nearly 1.2 million tonnes).

The Ontario newsprint industry had a 1984 capacity of 1.96 million tonnes, or just under 20% of all newsprint manufacturing capacity in the country. It was second only to Quebec, which accounted for 45% of Canadian capacity. Table 1 presents estimates of Ontario newsprint capacity by facility in 1984.

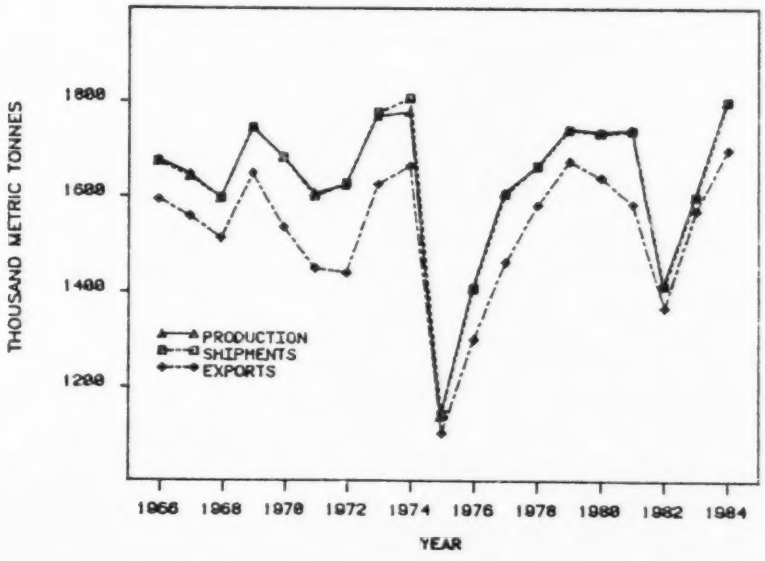
Most of the newsprint produced in Ontario uses traditional groundwood and sulphite pulping processes, although approximately 14% of the pulping capacity for newsprint in the province was recently converted to the thermomechanical process.

Figure 4 illustrates the location of newsprint mills within Ontario. All but one of the eight fully integrated newsprint facilities in the province are located in northern Ontario. It is estimated that 8,000 people in Ontario are employed directly by this industry in newsprint mills and related woodlands operations.



Source: Statistics Canada. Canadian newsprint exports, by province of origin and destination. Requested compilation.

Figure 2. Ontario newsprint exports by destination, 1970-1984.



Sources: 1) Statistics Canada. Pulp and paper mills. Cat. No. 36-204. Annual. Various issues.
2) Statistics Canada. Ontario newsprint exports, by destination. Requested compilation.

Figure 3. Ontario newsprint shipments, exports and production, 1966-1984.

Table 1. Ontario newsprint operating capacity[a] by facility—1984.

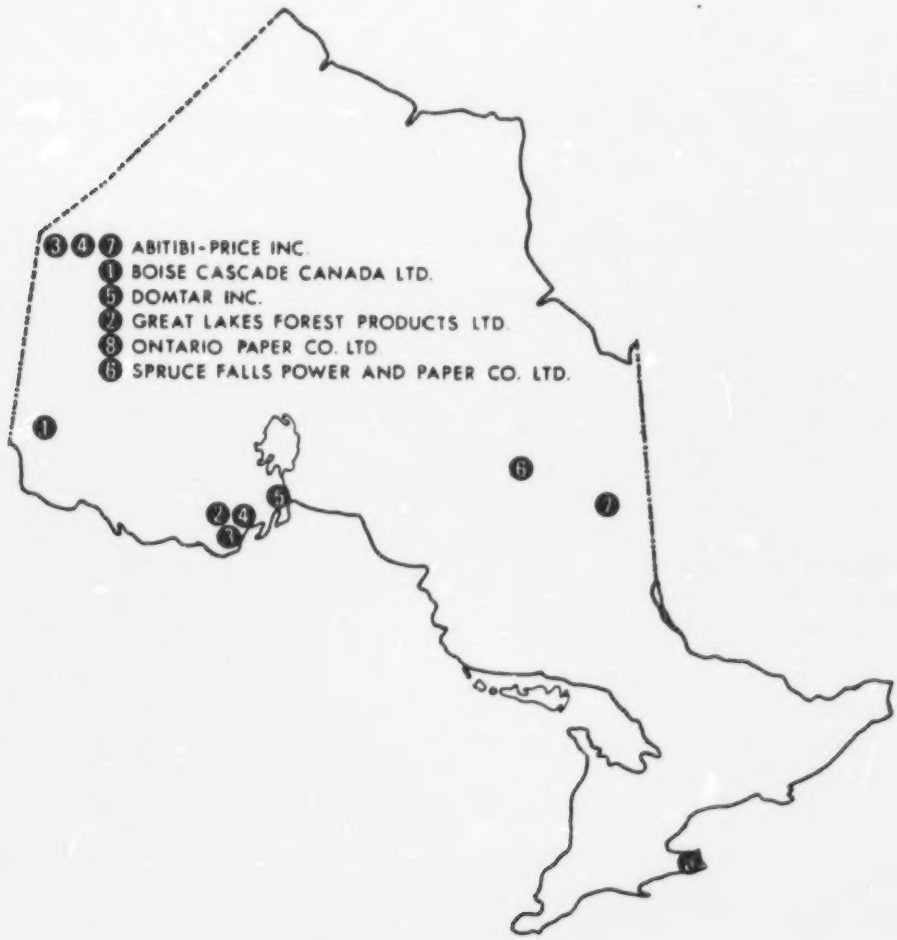
Facility	Annual operating capacity ('000 tonnes)
Abitibi-Price Inc.[b] Fort William Div. Thunder Bay	127
Abitibi-Price Inc.[c] Iroquois Falls Div. Iroquois Falls	265
Abitibi-Price Inc.[b] Thunder Bay Div. Thunder Bay	153
Boise Cascade Canada Ltd.[d] Kenora	275
Domtar Inc.[d] Domtar Packaging and Containerboard Div. Red Rock	70
Great Lakes Forest Products Ltd.[d] Thunder Bay	430
Ontario Paper Co. Ltd.[b] Thorold	305
Spruce Falls Power and Paper Co. Ltd.[d] Kapuskasing	338
	1,963

[a] Based on a 350-day operating year
[b] Source: Anon. 1984c
[c] Source: Pers. comm.
[d] Source: Coats 1983

MARKETS AND MARKET SHARE

The boundaries of Ontario's newsprint markets are defined largely by transportation costs. Transportation costs vary considerably, but can amount to over 15% of the selling price (Renwick 1985). The relatively high costs associated with accessing ocean freight routes by land or through the Great Lakes-St. Lawrence seaway systems inhibit Ontario producers from becoming stable suppliers to offshore markets.

This physical restriction limits the ability of Ontario producers to access new markets either on a permanent basis or even temporarily during periods of weak demand in traditional markets. For this reason, when traditional markets weaken, many Ontario producers are forced to discount prices dramatically.


3 4 7 ABITIBI-PRICE INC.
1 BOISE CASCADE CANADA LTD.
5 DOMTAR INC.
2 GREAT LAKES FOREST PRODUCTS LTD.
8 ONTARIO PAPER CO. LTD.
6 SPRUCE FALLS POWER AND PAPER CO. LTD.

Source: Coats 1983

Figure 4. Location of Ontario's newsprint producers, 1984.

The vertical integration of large American newspaper publishers into the Ontario industry has offset some of the vulnerability of producers to weak markets. The Spruce Falls Power and Paper Co. Ltd. in Kapuskasing is 49.5% owned by the New York Times, and the Ontario Paper Co. Ltd. in Thorold is wholly owned by the Chicago Tribune. It is estimated that between 10 and 15% of Ontario's newsprint production is sold to captive markets.

In 1984, approximately 45% of the newsprint purchased in the midwestern United States, 11% in the northeast, 4% in the west and 2% in the south came from Ontario.

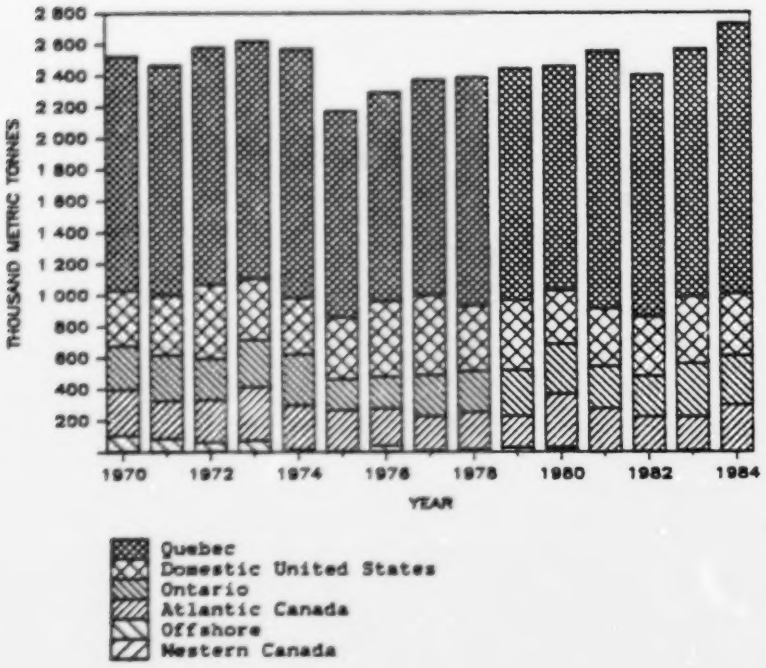
Figures 5 to 8 illustrate the sources of supply, by major supplying area, to each region of the United States between 1970 and 1983.

Figure 5 shows sources of supply for the northeastern United States between 1970 and 1984. Ontario producers managed to hold 11% of the market share in this region between 1970 and 1984. Quebec producers continue to dominate in this region, holding roughly 60% of the market. The market share of offshore imports (i.e., imports from areas outside North America) in the northeast decreased from 5% in 1970 to none at all in 1984.

Figure 6 shows sources of supply for the midwestern United States between 1970 and 1984. Ontario producers continue to dominate in this region, accounting for approximately 45% of the market share. Quebec producers are the second largest suppliers to the midwest, claiming 33% of this market. Market shares of major suppliers to this region, including domestic suppliers, are relatively stable, although during the strike of 1975, Quebec shipments increased to 38% of this market, largely at the expense of Ontario production. Offshore producers find it too costly to access the midwestern United States, and accordingly do not figure in this market.

Figure 7 shows sources of supply for the southern United States between 1970 and 1984. Ontario producers do not figure greatly in this region. The market share of Ontario producers in the southern United States decreased from 4% in 1970 to less than 2% in 1984, largely as a result of dramatic increases in capacity within the region. Capacity in the southern United States increased by 68% between 1970 and 1984. Offshore imports accounted for 2% of this market in 1984--up considerably from virtually no imports in 1983. The current influx of imports into the southern United States is due to the high value of the American dollar in comparison with Scandinavian currencies. Should the American dollar be devalued in relation to these currencies, it is very likely that newsprint imports from Scandinavia would fall off.

Figure 8 shows sources of supply for the western United States between 1970 and 1984. Ontario producers do not hold a significant share of the market in this region, although penetration of the Colorado-Nevada-Utah subregion has increased their share from none at all in 1970 to 4% in 1984. Domestic producers overtook British Columbia producers as major suppliers to this region in the late 1970s. Domestic capacity more than doubled here between 1970 and 1984,



Sources:

1) Canadian Pulp and Paper Association. Newsprint data, 1983. Annual Bulletin.

2) Statistics Canada. Canadian newsprint exports by province of origin and destination. Requested compilation.

Figure 5. Sources of newsprint for the northeastern United States, 1970-1983.

Sources:

1) Canadian Pulp and Paper Association. Newsprint data, 1983. Annual Bulletin.

2) Statistics Canada. Canadian newsprint exports by province of origin and destination. Requested compilation.

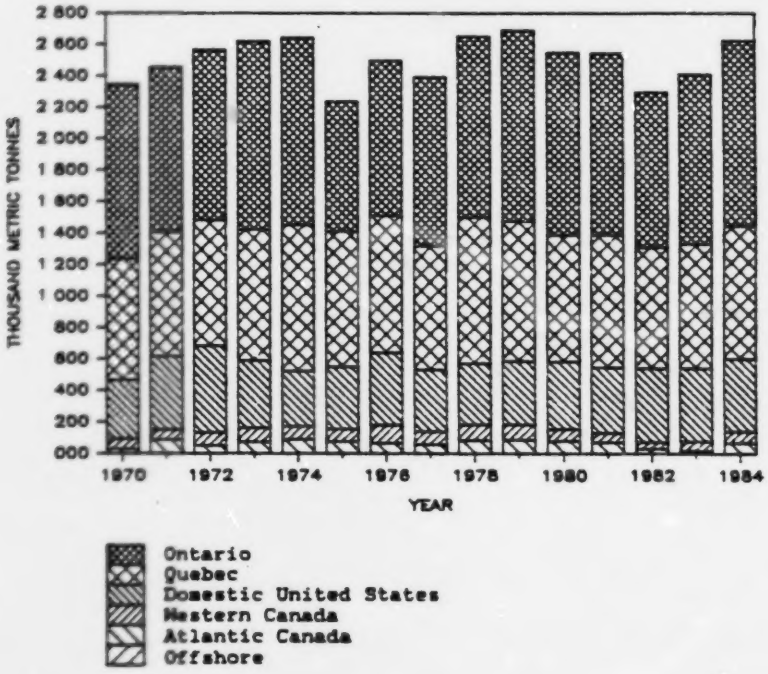
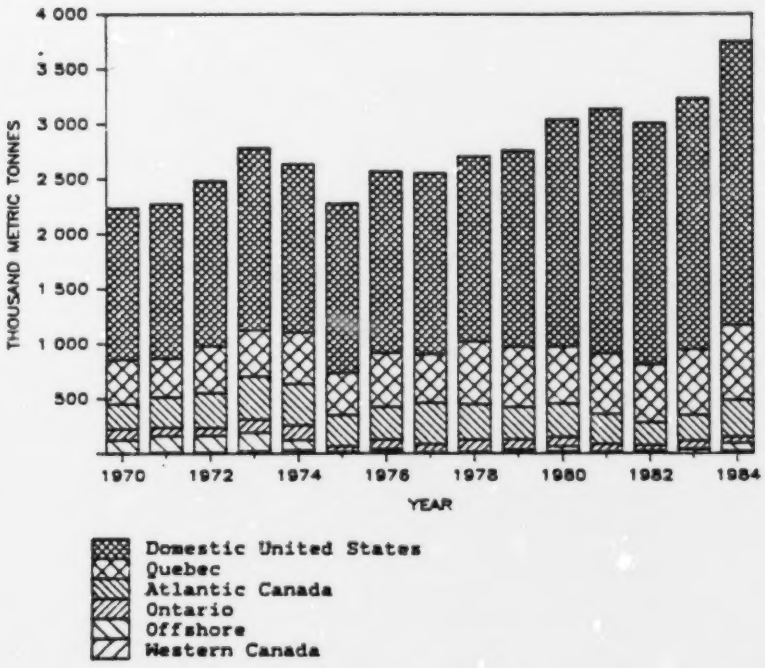


Figure 6. Sources of newsprint supply for the midwestern United States, 1970-1983.



Sources:

1) Canadian Pulp and Paper Association. Newsprint data, 1983. Annual Bulletin.

2) Statistics Canada. Canadian newsprint exports, by province of origin and destination. Requested compilation.

Figure 7. Sources of newsprint supply for the southern United States, 1970-1983.

Sources:

1) Canadian Pulp and Paper Association. Newsprint data, 1983. Annual Bulletin.

2) Statistics Canada. Canadian newsprint exports, by province of origin and destination. Requested compilation.

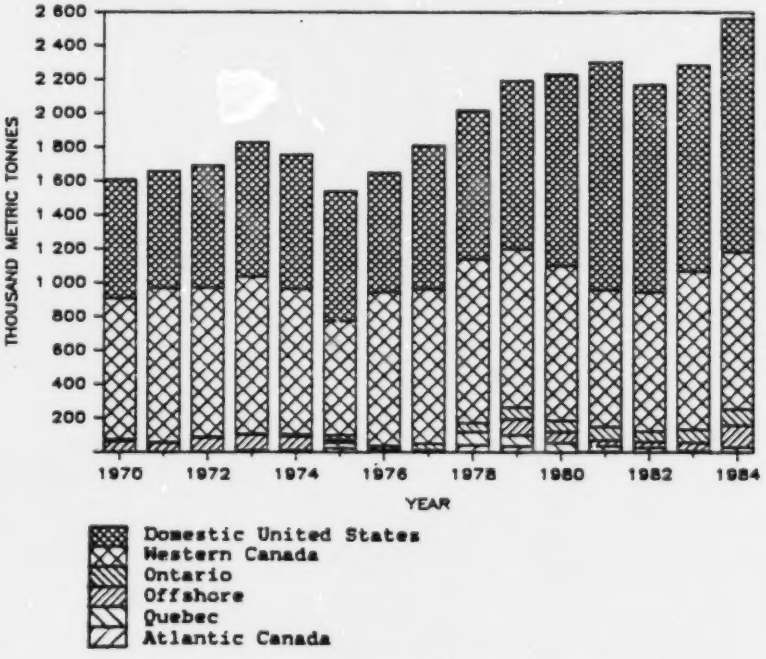


Figure 8. Sources of newsprint supply for the western United States, 1970-1983.

increasing from just over 800,000 tonnes in 1970 to 1,700,000 tonnes in 1984. Offshore imports into the western United States have reached a new high. In 1984, offshore imports accounted for 5% of the demand in this region. Again, this trend is a function of the current strength of the American dollar in comparison with Scandinavian currencies.

A number of observations can be made about this regional view of supply sources. First, the major competition to Ontario newsprint producers in both the northeastern and midwestern United States is provided primarily by producers in Quebec. Manitoba has one newsprint mill (Abitibi-Price Inc., Pine Falls), which exports to the midwestern and southern United States. Very little newsprint from British Columbia enters the northeastern or midwestern markets. While these data do not distinguish American sources of supply by region, it should be noted that shipments from the American south to the northeast and midwest are increasing.

SELLING PRICE

The Canadian selling price of Ontario newsprint exports is a function of supply, demand and the Canada-United States exchange rate.

Figure 9 illustrates the average export value per tonne[1] of newsprint shipped from Ontario between 1970 and 1983. It can be seen from Figure 9 that the selling value of newsprint in Ontario increased at a real compound rate of less than 2% per year between 1970 and 1984.

In real 1971 dollars, the 1984 newsprint selling value was roughly equivalent to the previous high reached in 1981. The current listed price of newsprint in American dollars was established in the spring of 1984 at $535. Another increase of $35 U.S. originally scheduled for April of 1985 has been postponed to the summer (Noble 1985).

COMPETITION

The ability of Ontario producers to maintain a market share in traditional market regions depends on their ability to meet the quality and price offered by producers in Quebec, maritime Canada and increasingly the southern United States, while still receiving reasonable margins on the delivered product. Publishers differentiate products on the basis of quality, particularly in periods of over-supply. Moreover, developments in printing technology have necessitated improvements in product printability, strength and roll condition.

While accurate cost data are not available, the relative competitiveness of newsprint production in Ontario can be inferred from a comparison of the capacity of newsprint machines in Ontario with that of major competitors. It is assumed for purposes of this analysis that newsprint machines with higher capacities produce newsprint at lower unit costs than do machines with lower capacities.

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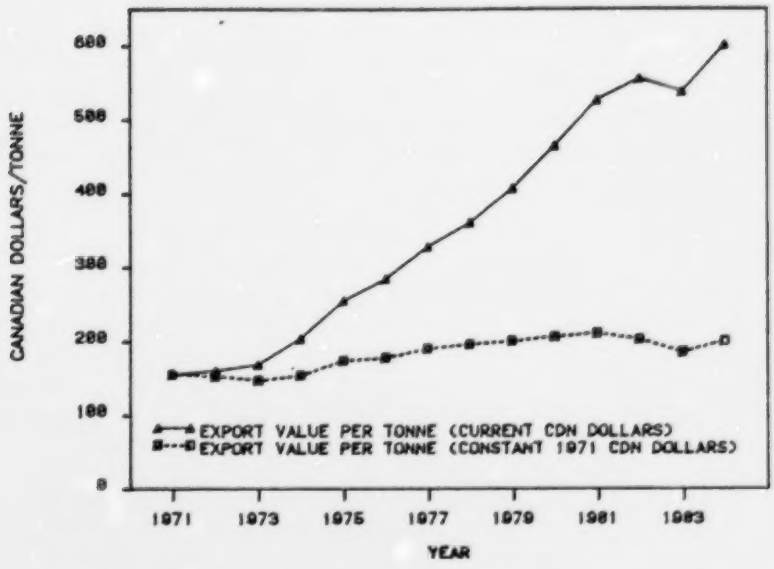
[1] Export value per tonne is defined by Statistics Canada as the value declared on export documents. In most cases, this value is F.O.B. at the factory.



Sources: 1) Statistics Canada. Canadian newsprint exports, by province of origin and destination. Requested compilation.
2) Statistics Canada. National income expenditure accounts. Cat. No. 13-201. Various issues.

Figure 9. Average export value of newsprint shipped from Ontario in current and constant (1971) Canadian dollars, 1971-1984.

Table 2. Estimated share of newsprint capacity by machine size and producing region in Canada and the United States.

Canada	Ontario	Quebec	Atlantic Canada	Western Canada	Total
< 100,000 tonnes/year	.46	.59	.42	.37	.49
100,000-150,000 tonnes/year	.38	.31	.38	.30	.35
> 150,000 tonnes/year	.16	.10	.20	.33	.16
United States	**Northeast**	**Midwest**	**South**	**West**	**Total**
< 100,000 tonnes/year	.52	1.00	.12	.38	.29
100,000-150,000 tonnes/year	.48	0.00	.35	.13	.28
> 150,000 tonnes/year	0.00	0.00	.53	.49	.43

Source: Coats 1983.

Table 2 illustrates the share of newsprint capacity by machine size class for the major producing regions of Canada and the United States. It can be seen from Table 2 that the profile of capacity by machine size for Ontario is roughly equivalent to that of Canada as a whole, although in western Canada 33% of all newsprint capacity is accounted for by machines capable of producing more than 150,000 tonnes per year. In Quebec only 10% of newsprint is produced on such machines. Finally, it is readily evident from Table 2 that a far greater portion of newsprint is produced on large machines in the southern and western United States than in Ontario or any other region of Canada.

This simple analysis indicates that production costs are slightly lower in Ontario than in Quebec, and that maritime producers may have a cost advantage over both of these provinces. Investment is required in all of eastern Canada so that mills can remain competitive with the low-cost producers of the southern and western United States.

REGIONAL NEWSPRINT DEMAND IN THE UNITED STATES

Figure 10 illustrates newsprint demand by region between 1970 and 1984, adjusted to a 30-lb basis weight.[2] Over this period, total demand in the United States increased at an average compound rate of 2.6% a year. It can be seen from Figure 10, however, that the highest growth in demand occurred in the south (4.2% a year), which was followed closely by the west (3.8%). In the midwest, newsprint demand increased at an average compound rate of 1.2% a year between 1970 and 1984, and in the northeast demand increased at a rate of 1.0% a year.

It is important to note the dramatic falling off of newsprint demand in the midwestern United States during the late 1970s. Between 1979 and 1984, demand in the midwest actually decreased by 2.3%. In contrast, there were increases of 36.6% in the south, 17.6% in the west, and 12.4% in the northeast. Total demand in the United States increased by 16.2% between 1979 and 1984. Demand in all regions decreased in 1982, but rebounded in 1983 and again in 1984.

In order to explain the disparity in regional demand for newsprint in the United States and in particular the flat demand in the midwest, it is necessary to examine the economic profiles of the four major market regions. A number of economic variables directly and indirectly related to newsprint demand have been selected for this purpose:

- real growth in personal income
- demand per capita for newsprint
- growth of working-age population
- growth in circulation and number of papers

---

[2] 30 lb per ream (48.8 g per m^2) of 500 sheets (24 in. x 36 in.) (approx. 61 cm x 91 cm)

Growth in Real Income by Region

A measure of economic growth within a region can be obtained by examining changes in real personal income within that region. Figure 11 illustrates real personal income by region from 1970 to 1983. During this period, real personal income grew much more rapidly in the southern and western United States than in the northeast and midwest.

Between 1970 and 1983, real personal income in the United States grew at an average compound rate of 4.0% a year in the south, 3.8% in the west, 3.0% in the midwest and 1.7% in the northeast.

It is necessary to examine the midwest more closely. Virtually all of the growth in the midwest occurred before 1979. In fact, the midwest had the highest rate of growth in real personal income between 1970 and 1979. After 1979, this situation changed. By 1983, in real terms, the midwest had the same personal income as it did in 1978. The current economic disparity in the midwest can, in part, be attributed to the state of the manufacturing and agricultural industries in this region and to a migration of manufacturing industries from this region to the south (Friedenburg and Conklin 1984).

Newsprint Demand Per Capita

Figure 12 illustrates newsprint demand per capita (30-lb basis weight) between 1970 and 1983 for each of the four major regions of the United States. The degree of urbanization in each region is reflected in these data. In 1980, the latest year for which data are available, 71% of the population in the midwest, 67% in the south, 82% in the west and 85% in the northeast were dwelling in the metropolitan areas[3]. As expected, demand per capita is lowest in the midwest and south because of the rural nature of these regions.

Newsprint consumption per capita is higher in urban areas for a number of reasons. First, newsprint consumption is directly related to real personal income, and people dwelling in urban areas generally have higher average incomes than those dwelling in rural areas. Second, metropolitan areas are commercial centers, which have higher advertising expenditures than do resource-oriented rural areas. Finally, newspaper advertising is a more efficient means of communication in urban areas because changes in distribution are fewer and unit production costs are lower, since publishers can achieve economies of scale.

Demand in the midwest increased from 37 kg per capita in 1970 to 46 kg per capita in 1979, but then declined to 41 kg per capita by 1983. A trend toward increased urbanization and the strong growth in real personal income increased demand in this region from 33 kg per capita in 1970 to 41 kg per capita in 1983. Rapid economic growth in the west increased demand for newsprint from 43 kg per capita in 1970 to 50 kg per capita in 1983. Demand in the northeast increased marginally over this period from 48 kg per capita to 52 kg per capita.

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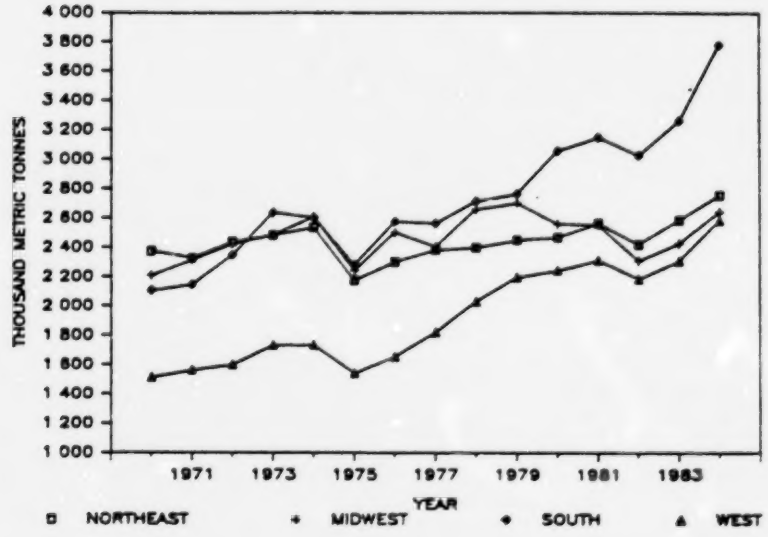
[3] The United States Bureau of the Census defines a metropolitan area as a city of more than 50,000 people or an urban area, as set out by the Bureau, of at least 50,000 inhabitants and a total standard metropolitan statistical area of at least 100,000 people.



Source:

Canadian Pulp and Paper Association. Newsprint data, 1983. Annual Bulletin.

Figure 10. Demand for newsprint in the United States by region, 1970-1984.

Source:

U.S. Bureau of the Census. Statistical abstract of the United States. Washington, D.C. Annual. Various issues.

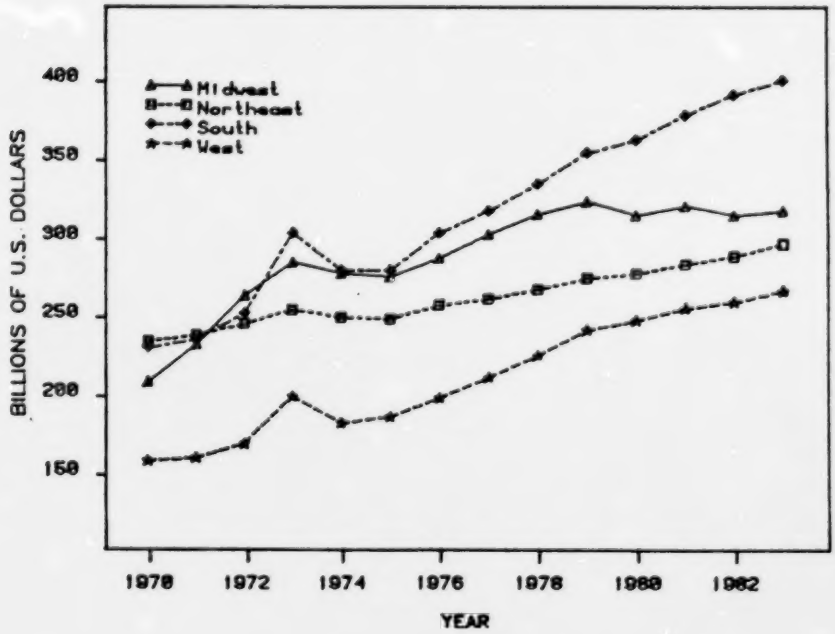
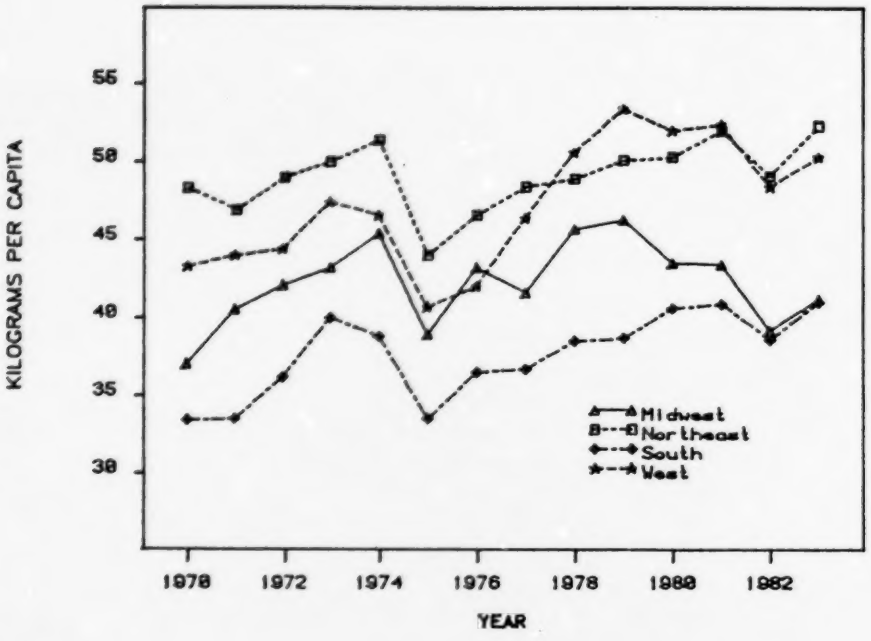


Figure 11. Real personal income in the United States by region, 1970-1983.



Note: Data adjusted to 30-lb basis weight.

Source: U.S. Bureau of the Census. Statistical abstract of the United States. Washington, D.C. Annual. Various issues.

Figure 12. Newsprint demand per capita by region in the United States, 1970-1983.

Table 3. Growth of the working-age population (aged 18-64) by United States region.

Region	Millions			% Change		
	1970	1980	1983[a]	1970-1983	1970-1980	1980-1983
Northeast	27,838	29,980	30,819	+ 10.7	+ 7.7	+ 2.8
Midwest	31,022	35,255	35,810	+ 15.4	+ 13.6	+ 1.6
South	34,935	45,247	48,651	+ 39.3	+ 29.5	+ 7.5
West	19,779	26,759	28,742	+ 45.3	+ 35.3	+ 7.4
Total	113,574	137,241	144,022	26.8	20.8	4.9

[a] Estimated by United States Bureau of the Census

Sources: 1) United States Bureau of the Census. Statistical abstract of the United States. Washington, D.C. Annual. Various issues.
2) Anon. 1984[b].

Growth of Working-age Population by Region

People between the ages of 18 and 64, the working segment of the population, account for the majority of newsprint consumption. Over the past decade, there has been a trend by the working-age population to migrate from the midwest and northeast to the south and west, largely because of the economic stagnation of manufacturing industries in the north.

Table 3 illustrates the growth, by region, in number of residents aged 18 to 64 between 1970 and 1983. It can be seen that, between 1970 and 1983, the working-age population in the west and south increased dramatically (by 45.3% and 39.3%, respectively). Over the same period, the working-age population of the midwest and northeast increased by 15.4% and 10.7%, respectively.

Between 1980 and 1983, however, the working-age population of the midwest increased by only 1.6%, that of the northeast by 2.8%, that of the west by 7.4% and that of the south by 7.5%, again reflecting the relatively weak economic state of the midwest in recent years.

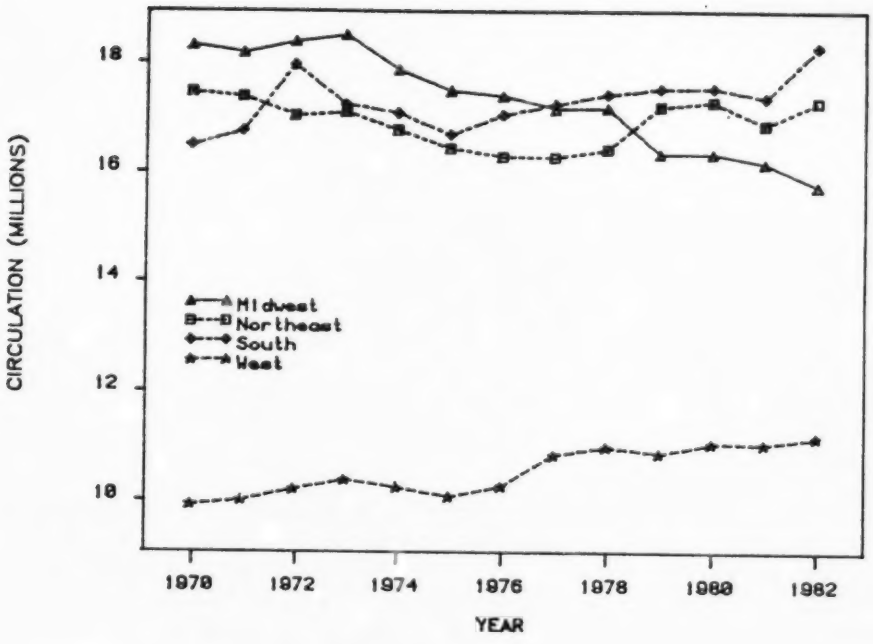
Only the high-growth states in the south and west have growing populations between the ages of 5 and 17 and 18 and 24 (Anon. 1984b). Unless population trends change significantly, this would suggest that growth in the working-age segments of the population will continue to be minimal in the midwest and northeast over the next 20 years.

Circulation and Number of Papers

Changes in the economic and social profiles of the four major regions of the United States are reflected in circulation statistics. Figure 13 shows newspaper circulation by region from 1970 to 1983. It can be seen that circulation increased in the west and south by 12.5% and 10.9%, respectively, over this period. Circulation in the northeast decreased in the mid-1970s, but returned to its 1970 level by 1983. Between 1970 and 1983, circulation in the midwest decreased dramatically (by 14%).

Table 4 illustrates the change in number of papers published by region between 1970 and 1983. Weak demand in the northeast and midwest has forced publishers in these regions to rationalize production and distribution efforts over this period. Between 1970 and 1983, the number of daily papers published in the midwest and northeast decreased by 7.9% and 7.8%, respectively. In the south and west, however, economic growth and an increasingly diverse population led to a rise of 4.5% and 3.1%, respectively, in publication of daily newspapers.

The percentage of advertising dollars spent on newspaper advertising in the United States decreased from over 30% in the early 1970s to 26.6% in 1982. In 1983, however, newspaper advertising increased to 27.1% of total advertising expenditures in the United States. Hayroe (1984) suggests that recent changes in the television broadcasting industry have made advertising in this medium less popular. He cites technical innovations such as wireless remote switching devices and video recording units as reasons for the reduced effectiveness of television advertising. This trend should have a positive effect on newsprint consumption over the next few years.



Source: United States Bureau of the Census. Statistical abstract of the United States. Washington, D.C. Annual. Various issues.

Figure 13. Newspaper circulation by region in the United States, 1970-1982.

Table 4. Numbers of daily and Sunday newspapers by United States census region (1970-1982).

	Daily papers		
Region	1970	1982	% Change
Northeast	329	303	- 7.9
Midwest	577	532	- 7.8
South	552	577	4.5
West	290	299	3.1
Total	1,748	1,711	- 2.1

Source: United States Bureau of the Census. Statistical abstract of the United States. Washington, D.C. Annual. Various issues.

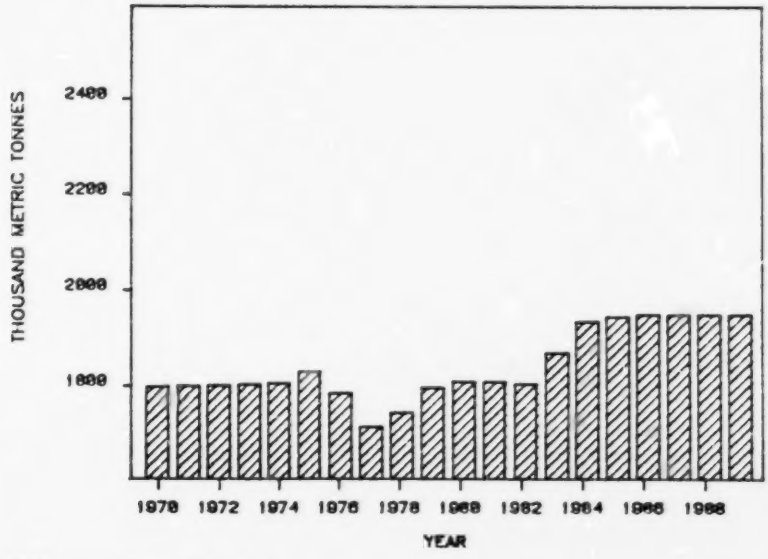
SUPPLY AND DEMAND PROJECTIONS

Projected Newsprint Capacity

Increases in Ontario newsprint capacity during the early 1980s were due primarily to the modernization efforts of the industry. Between 1979 and 1984, Ontario's newsprint capacity increased by approximately 163,000 tonnes. These efforts at modernization were encouraged largely through the Canada-Ontario Facilities Improvement Subsidiary Agreement. All newsprint mills in the province participated in this program.

The industry will be burdened for a number of years with the financing charges associated with these and related modernization programs. In addition, an over-supply since 1982 has limited the profitability of the newsprint industry. While efforts at modernization will have to continue in order to meet the increasingly stringent quality requirements of customers, it is likely that these efforts will be far less ambitious in the future. Capacity increases resulting from modernization projects will be minimal.

Figure 14 illustrates historical and projected newsprint capacity in Ontario from 1970 to 1989. The largest scheduled program yet to be completed in this decade is that of Boise Cascade Canada at its Kenora mill. Boise Cascade Canada plans to rebuild all three of its newsprint machines, and at the same time improve the pulping processes at the Kenora mill (Anon. 1984a). These improvements will also enable Boise Cascade Canada to produce a number of groundwood papers. The project is scheduled for completion by January, 1986.



Note: 1987-1989 capacity estimated.

Source: Canadian Pulp and Paper Association. Newsprint data. 1983. Annual Bulletin.

Figure 14. Historical and projected Ontario newsprint capacity, 1970-1989.

Shortages of economically accessible softwood fiber are evident in some regions; however, provincial forest management authorities maintain that the situation is fully manageable. Improvements in pulping yields and the use of alternative sources of supply, such as Ontario Paper Company's conversion to a 25% waste newsprint furnish, will alleviate some of the medium-term concern over wood supply in the province.

Projected Demand for Newsprint in the United States

Over 94% of the historical variation in newsprint demand in the United States can be explained by using real growth in gross national product (GNP) as the only predicting variable. The following simple, straight-line regression relationship was established as the best fit between total newsprint demand in the United States (30-lb basis weight), and real GNP in 1972 dollars.

$$D = 762 + 6.39\ GNP$$

Where: D = newsprint demand (thousand metric tonnes, 30-lb basis weight)
GNP = U.S. gross national product in 1972 dollars

With estimates of future real GNP, this historic relationship between GNP and newsprint demand can be used to forecast newsprint demand. Future estimates of GNP are available from a number of agencies. This analysis uses projections of United States GNP from the Conference Board of Canada[4].

In order to use this historical relationship to project future demand, it must be assumed that the nature in which newsprint has been historically consumed will not be altered in the future. Growth in electronic information systems is inevitable, yet it is unlikely that these systems will displace demand for newsprint in the near future. Udell (1983) has concluded that technological innovation in the communications industries is not likely to displace newsprint consumption in the United States before 1990.

Figure 15 illustrates projections of total United States demand between 1984 and 1989, by using the regression relationship established above and real United States GNP estimates from the Conference Board of Canada.

This projection shows newsprint demand in the United States increasing at an average rate of 2.5% a year between 1984 and 1989. (The actual average growth rate in newsprint demand in the United States was 2.3% a year between 1970 and 1984.) In addition, the projection sees limited growth in demand in 1985, followed by stable and relatively strong growth through to 1989. Demand for newsprint in the United States is projected to reach 13 million tonnes by 1989.

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[4] 1 January, 1985. Five-year United States GNP.

Projected Regional Demand for Newsprint in the United States

Regional demand is not highly correlated with real growth in total GNP in the United States because of differences in the economic and social profiles of the four regions. Nonetheless, future demand by region can be estimated as a share of projected total demand in the United States.

Figure 16 illustrates regional demand for newsprint as a proportion of total demand in the four major regions of the United States between 1970 and 1984. As expected, demand in the northeast and midwest, expressed as a percentage of total United States demand, decreased over this period, and demand in the south and west increased. In 1970, the midwest and northeast accounted for 28.9 and 26.9%, respectively, of total United States demand. By 1984, however, the midwest and northeast accounted for 22.4 and 23.4%, respectively, of total United States demand. The share of total United States demand accounted for by the south and west, on the other hand, increased from 25.7% and 18.4% respectively, in 1970 to 32.1% and 22.0% in 1984.

It will be simplistically assumed that the regional economies of the United States have reached a new equilibrium, and that the respective regional share of demand for newsprint in each region will not change between 1984 and 1989. Figure 17 uses the United States demand projection in Figure 15 and the 1984 shares of total United States demand by region to forecast regional demand between 1985 and 1989.

PROJECTED NEWSPRINT SHIPMENTS FROM ONTARIO

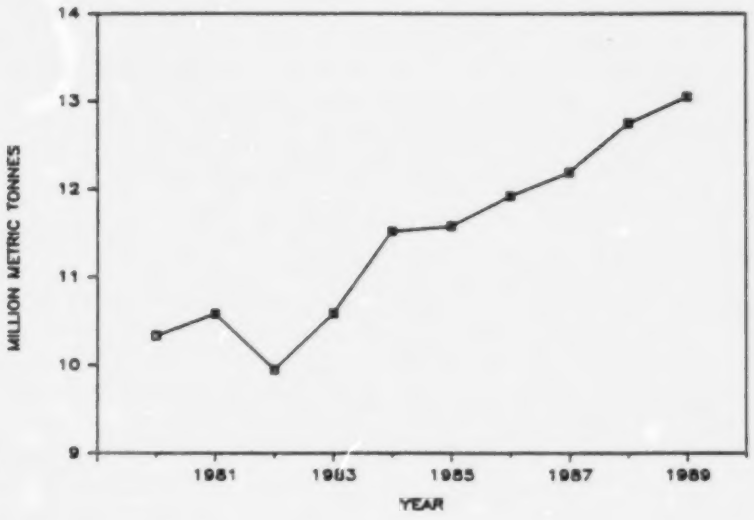
Estimates of future newsprint shipments from Ontario can now be made by using these regional demand projections from Figure 17 and assuming the following:

1. Ontario newsprint producers will continue to hold 43% of the midwestern United States newsprint market and 12% of the northeastern market;

2. Ontario producers will continue to ship 150,000 tonnes of newsprint to the southern and western United States;

3. Domestic shipments by Ontario producers will increase at a rate of 2% a year, starting at 150,000 tonnes in 1985.

Figure 18 illustrates projected newsprint shipments from Ontario between 1985 and 1989, on the basis of the above assumptions. Projected capacity is also plotted on Figure 17. It can be seen that utilization rates will continue to improve throughout the remainder of the decade. This analysis implies that, with current capacity projections, Ontario producers will be operating at close to full capacity by 1988.



Note:

1980-1983 data are actual demand.

Figure 15. Projected newsprint demand in the United States, 1984-1989.

Source:

Canadian Pulp and Paper Association. Newsprint data, 1983. Annual Bulletin.

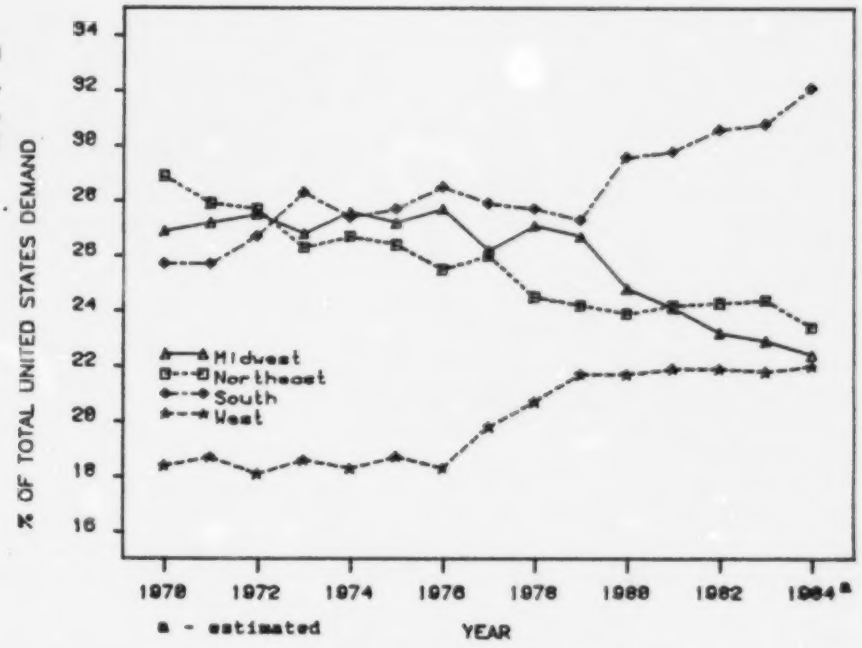


Figure 16. Regional share of demand for newsprint in the United States.

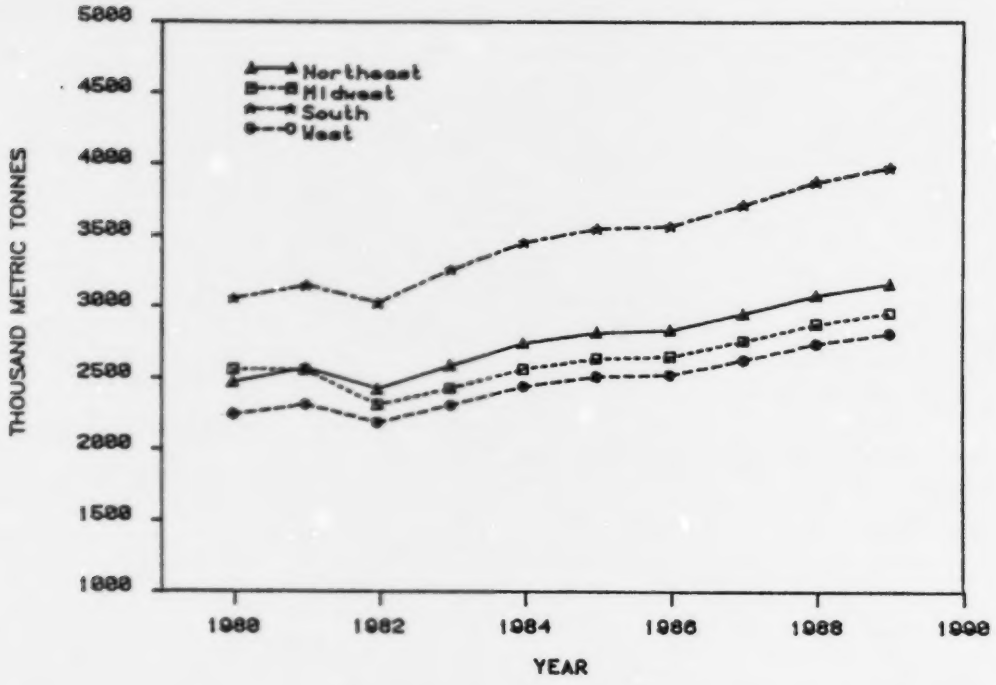


Figure 17. Projected regional demand for newsprint in the United States if it is assumed that regional growth rates are equivalent to projected newsprint growth rate between 1984 and 1989.

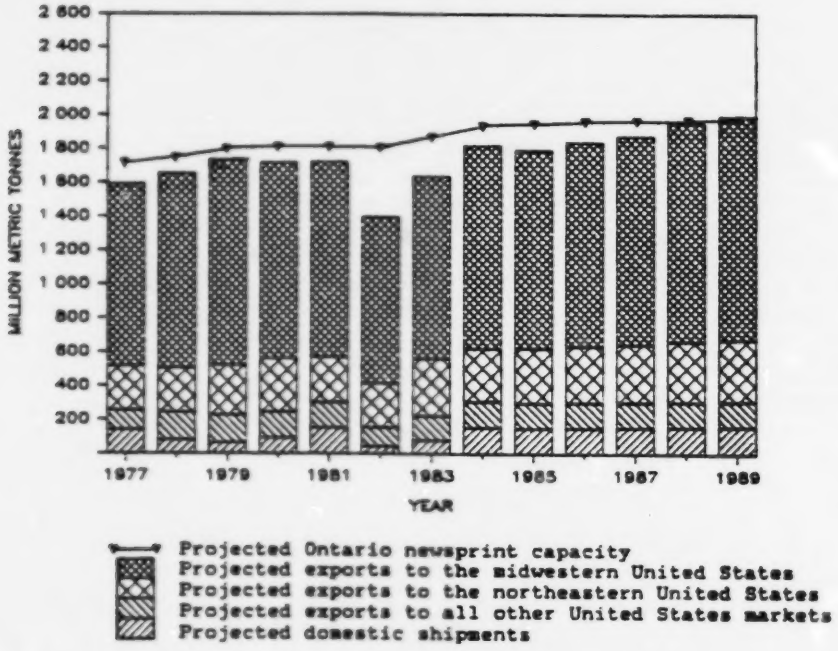


Figure 18. Actual and projected Ontario newsprint shipments and capacity, 1977-1989.

SUMMARY AND IMPLICATIONS

Ontario newsprint producers have limited access to markets other than those in the northeastern and midwestern United States, because of high transportation costs associated with shipping to these alternative markets and the availability of competitively priced products from new and established suppliers to these markets.

Over the medium term, growth in newsprint demand in the northeastern and midwestern United States will be limited. In addition, these markets will become increasingly competitive. Shipments from producers in the southern United States to the northeast and midwest will increase as long as low-cost Scandinavian imports continue to enter the west and south. The duration of this trend is dependent largely upon the strength of the American dollar in comparison with Scandinavian currencies. In addition, newsprint shipped to the northeastern United States from Quebec and Atlantic Canada will be priced more competitively as producers in these regions react to the recent imposition of an import quota on Canadian newsprint imports into the European Economic Community.

In order to meet the competitive challenges ahead, newsprint producers in Ontario must control production costs, continue to meet the increasingly stringent quality requirements of customers, and compete with less expensive products from the southern United States and, at least over the short term, from Scandinavia. Quality control and service to major customers are two tasks of paramount importance if market share in the midwest and northeast is to be maintained.

Analysis of machine size by producing region suggests that the production costs of Ontario producers are not significantly different from those of their major Canadian competitors. Ontario producers should be able to maintain their market share in the northeastern and midwestern United States. Even if they succeed in doing this, however, it is estimated that the capacity utilization rate in the province will not approach 100% until the end of the decade.

This is not a period of growth for the Ontario newsprint industry. Although the industry is constrained financially, selective capital programs are still necessary for quality refinement and reduction of production cost. Employment increases as a result of these efforts will be minimal and some programs may result in reduction of employment in the industry. These efforts will ensure the medium- and long-term health of the Ontario newsprint industry so that it may continue to contribute to the national and provincial economies.

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